

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (canceled)
2. (canceled)
3. (currently amended) The method as set forth in claim ~~[[2]]~~ 4 wherein changes in the relative positions between the images are captured and assigned to the images and wherein position indications assigned to the images or to the data derived therefrom are stored in the data collection.
4. (currently amended) A method for establishing a data collection
 - with the aid of at least one imaging means and at least one illuminating device,
 - wherein an object is imaged from at least three different imaging directions and
 - illuminated from at least three different illumination directions, each in direct light,
 - wherein one imaging direction each being substantially opposed to one illumination direction,

- so that from each of the three imaging directions at least one contour of the object appears with a light side and a shadow side of the object,
- and substantially the complete object is imaged from the at least three imaging directions by the at least one imaging means,
- wherein the imaging directions and the illumination directions, on the one hand, and the object, on the other, are movable defined relative to each other with several degrees of freedom,
- wherein the images and/or the data derived therefrom are stored in the data collection,
- wherein images are made in various relative positions of image capture devices and illumination devices, on the one hand, and of the object, on the other, and

~~The method as set forth in claim 2~~ - wherein the illumination devices and the image capture devices are arranged substantially star-shaped, the illumination directions as viewed from one direction comprising in pairs an angle between 75 degrees and 145 degrees, preferably 120 degrees and as viewed from one direction the imaging directions comprising in pairs an angle between 75 degrees and 145 degrees, preferably 120 degrees.

5. (currently amended) The method as set forth in claim ~~[[2]]~~ 4 wherein each imaging is performed substantially from the imaging directions via light from the substantially opposed illumination direction, preferably by switching and/or by polarization and/or spectral filtering and/or by use of at least one color rendering image capture device.

6. (currently amended) The method as set forth in claim ~~[[2]]~~ 4 wherein several images are made between which the position of the image capture devices and illumination devices is changed mutually.
7. (original) The method as set forth in claim 6 wherein the position of the image capture devices and illumination devices is determined by a robotic setting.
8. (currently amended) The method as set forth in claim ~~[[2]]~~ 4 wherein several images are made between which the position of the object is changed.
9. (original) The method as set forth in claim 8 wherein the position of the object is changed by means of a robotic device.
10. (canceled)
11. (canceled)
12. (canceled)
13. (currently amended) A method of gripping an object from a plurality of objects
 - with the aid of at least one imaging means and at least one illuminating device,

- wherein the object is imaged from at least three different imaging directions and
- is illuminated from at least three different illumination directions, each in direct light,
- wherein one imaging direction each being substantially opposed to one illumination direction,
- so that from each of the three imaging directions at least one contour each of the object appears with a light side and a shadow side of the object,
- and substantially the complete object is imaged from the at least three imaging directions by the at least one imaging means,

wherein reference images and/or data derived therefrom contained in a data collection as set forth in claim 10 are used structured as set forth in claim 4.

14. (currently amended) The method as set forth in claim ~~12~~ 15 wherein images of the object and images or derived data in the data collection are compared.

15. (currently amended) A method of gripping an object from a plurality of objects

- with the aid of at least one imaging means and at least one illuminating device,
- wherein the object is imaged from at least three different imaging directions and
- is illuminated from at least three different illumination directions, each in direct light,
- wherein one imaging direction each being substantially opposed to one illumination direction,

- so that from each of the three imaging directions at least one contour each of the object appears with a light side and a shadow side of the object,
- and substantially the complete object is imaged from the at least three imaging directions by the at least one imaging means,

~~The method as set forth in claim 12 comprising~~ wherein the at least one imaging means and at least one illuminating device comprise a substantially star-shaped arrangement of illumination devices and image capture devices, whereby as viewed from one direction the illumination directions comprise in pairs an angle between 75 degrees and 145 degrees, preferably 120 degrees and as viewed from one direction the imaging directions comprise in pairs an angle between 75 degrees and 145 degrees, preferably 120 degrees.

16. (currently amended) The method as set forth in claim ~~12~~ 15 wherein the image capturing is performed substantially from the imaging directions via light from the substantially opposed illumination direction, preferably by switching and/or by polarization and/or by spectral filtering and/or by use of at least one color rendering image capture device.
17. (currently amended) A non-transitory computer-readable storage ~~means~~ medium comprising a program code which implements the method as set forth in claim ~~12~~ 15 when ~~loaded in~~ read by a computer.

18. (canceled)

19. (currently amended) A device for gripping an object from a plurality of objects,

- with at least three image capture devices and
- at least three direct illumination devices, wherein one image capture device each is substantially opposed to one illumination device,
- so that from each of the three image capture devices at least one contour each of the object can be imaged with a light side and a shadow side of the object ,
- and substantially the complete object can be imaged by the at least three image capture devices in combination,

which is configured to use reference images and/or data derived therefrom contained in a data ~~collection~~ collection as set forth in claim 10 structured as set forth in claim 4.

20. (currently amended) A device for gripping an object from a plurality of objects

- with at least three image capture devices and
- at least three direct illumination devices, wherein one image capture device each is substantially opposed to one illumination device,
- so that from each of the three image capture devices at least one contour each of the object can be imaged with a light side and a shadow side of the object,
- substantially the complete object can be imaged by the at least three image capture devices in combination, and

~~The device as set forth in claim 18 further comprising~~ a substantially star-shaped arrangement of illumination devices and image capture devices, whereby as viewed from one direction the illumination directions comprise in pairs an angle between 75 degrees and 145 degrees, preferably 120 degrees and as viewed from one direction the imaging directions comprise in pairs an angle between 75 degrees and 145 degrees, preferably 120 degrees.

21. (currently amended) The device as set forth in claim ~~18~~ 20 configured for capturing images via light from the substantially opposed illumination direction, preferably by switching means and/or by polarization and/or spectral filters and/or by at least one color rendering image capture device.